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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,215	11/05/2001	Johnny R. Brezina	AUS920010763US1	4015

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EXAMINER

KIM, RICHARD H

ART UNIT PAPER NUMBER

2871

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,215

Applicant(s)

BREZINA ET AL.

Examiner

Richard Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-7, 8-10 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giboney et al. (US 6,318,909 B1) in view of Jang (US 6,516,130 B1).

Referring to claims 1, 8, 9, 10, 17 and 18, Giboney et al. discloses a device comprising a die carrier having a generally planar edge (see Fig. 3A, ref. 30); a multiple array lens disposed on the edge of the die carrier (see Fig. 2b, ref. 59; col. 11, lines 21-25); at least one optical die disposed on the edge of the die carrier (see Fig. 3A, ref. 32); an input/output connector half having a generally planar surface disposed perpendicularly to the edge of the die carrier (see Fig. 3A; ref. 44; col. 5, lines 22-27); the input/output connect half surface having an input/output connection (see col. 10, lines 20-29); and a circuit cable connected between the optical die and the input/output connection (see col. 10, lines 9-29; Fig. 1, ref. 26), wherein the optical fiber module further comprises an upper connector and a lower portion (see Fig. 3A, ref. 44).

However, the reference does not disclose that the upper connector comprises a pair of rearward mounting screw holes and the lower portion comprises a pair of forward mounting screw holes.

Jang discloses a fiber optic module comprises an upper portion and a lower portion, the upper portion comprising a pair of rearward mounting screw holes and the lower portion

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comprising a pair of forward mounting screw holes (see Fig. 1, ref. 20). Examiner assumes that the fourth screw hole is visually obstructed by the housing 14.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a pair of rearward and forward mounting screw holes on upper portion and lower portion, respectively, in order to improve the stability of the device. Through the use of the screw holes, screws can be screwed through the holes, thereby securely fastening the fiber optic module to a printed circuit board, providing reliable reinforcement. In the arguendo that the fourth screw hole is not explicitly illustrated, adding a fourth screw hole would further improve the stability of the device through added reinforcement. Moreover, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Referring to claims 5 and 14, Giboney et al. discloses that the multiple array comprises a laser (see col. 5, lines 8-11).

Referring to claims 6 and 15, Giboney et al. discloses that the multiple array comprises a photodetector (see col. 5, lines 8-11).

Referring to claims 7 and 16, Giboney et al. discloses a device comprising an upper and lower fiber connector portion connected to the die carrier, the upper and lower fiber connector portions being adapted to receive an optical fiber (see Fig. 3A, ref. 44). Moreover, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. *In re Hutchinson*, 69 USPQ 138.

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3. Claims 2-4, 11-13, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giboney et al. and Jang et al., in view of Carden et al. (US 5,202,943).

Giboney et al. discloses a device comprising an optical fiber (see Fig. 1A, ref. 71); a die carrier having a generally planar edge (see Fig. 3A, ref. 30); a multiple array lens disposed on the edge of the die carrier (see Fig. 2b, ref. 59; col. 11, lines 21-25), the lens array including at least one laser and at least one photodetector (see col. 5, lines 5-11); an input/output connector half having a generally planar surface disposed perpendicularly to the edge of the die carrier (see Fig. 3A, ref. 44), the input/output connector half surface having an input/output connection (see col. 10, lines 20-29); a circuit cable connected between the multiple lens and the input/output connection (see col. 10, lines 9-20; Fig. 1, ref. 26); and an upper fiber connector portion and a lower fiber connector portion connected to the die carrier, the upper and lower fiber connector portions being adapted to receive and optical fiber (see Fig. 3a, ref. 44). However, the reference does not disclose that the upper connector comprises a pair of rearward mounting screw holes and the lower portion comprises a pair of forward mounting screw holes.

Jang discloses a fiber optic module comprises an upper portion and a lower portion, the upper portion comprising a pair of rearward mounting screw holes and the lower portion comprising a pair of forward mounting screw holes (see Fig. 1, ref. 20). Examiner assumes that the fourth screw hole is visually obstructed by the housing 14.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a pair of rearward and forward mounting screw holes on upper portion and lower portion, respectively, in order to improve the stability of the device. Through the use of the screw holes, screws can be screwed through the holes, thereby securely fastening

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the fiber optic module to a printed circuit board, providing reliable reinforcement. In the arguendo that the fourth screw hole is not explicitly illustrated, adding a fourth screw hole would further improve the stability of the device through added reinforcement. Moreover, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Further, the recitation that an element is "adapted" to perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

Moreover, the reference does not disclose that the die carrier comprises a ceramic, aluminum nitride or aluminum nitride ceramic.

Carden et al. discloses a die support made of ceramic (see Fig. 7, ref. 27 and col. 5, line 64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the carrier comprise ceramic, aluminum nitride or aluminum nitride ceramic in order to improve the durability of the device, since ceramics are known in the art to have high resistance to temperature. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Moreover, since the Applicant has disclosed multiple materials that can be used as the die, it is the Examiner's position that whether the material used is ceramic, aluminum nitride or aluminum nitride ceramic, the type of material used is not critical to the invention, and therefore would be obvious.

Response to Arguments

4. Applicant's arguments filed July 9, 2003 have been fully considered but they are not persuasive.
5. In response to Applicant's argument that Giboney or Carden do not teach or suggest "the upper fiber connector portion comprising a pair of rearward mounting screw holes and the lower fiber connector portion comprising a pair of forward mounting screw holes", Examiner recognizes the reference's shortcomings. However, the newly added limitation necessitated the incorporation of a secondary teaching to Jang.
6. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., top down) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Kim whose telephone number is (703)305-4791. The examiner can normally be reached on 9:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (703)305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Richard Kim
Examiner
Art Unit 2871

RHK


TOANTON
PRIMARY EXAMINER